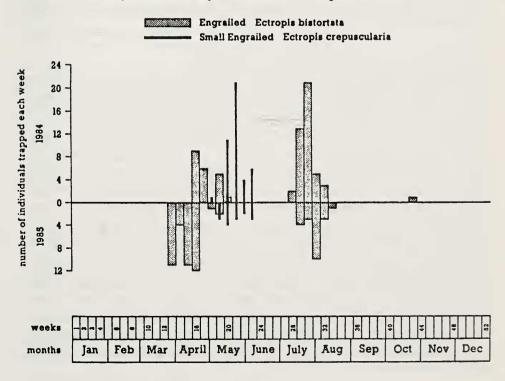
THIRD BROOD SPECIMENS OF ECTROPIS BISTORTATA GOEZE (LEP.: GEOMETRIDAE)

By P. WARING

With reference to Mr West's note on the frequency or infrequency of third brood specimens of the moth, *Ectropis bistortata*, I took a specimen of this species on 22 October 1984 in Oakley Wood which is part of the woods collectively known as Bernwood Forest on the Oxfordshire/Buckinghamshire border. I can offer some data on the relative frequency at moth traps of these probably third brood specimens in relation to the other two broods of *Ectropis bistortata* and to the occurrence of the small engrailed, *Ectropis crepuscularia* with which second brood engrailed in particular are sometimes confused.

From January 1984 to December 1985 I operated six Actinic traps (Heath 1965) simultaneously on one night per week every week at fixed sites within Oakley Wood. The accompanying chart shows the total weekly catches of *E. bistortata* and *E. crepuscularia* for the six traps. The weeks of the year are numbered consecutively from 1 January. Adults of the second brood of engraileds, *E. bistortata*, were trapped over a period of five weeks from early July into August in both years. This is similar to the situation that Mr West observed in Kent. In

The numbers of Engrailed and Small Engrailed moths trapped on weekly visits to Oakley Wood, Bucks. during 1984 and 1985.



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1984 a single third brood specimen was recorded but no such specimens were seen in 1985. In a total of forty seven complete nights of moth trapping in Oakley Wood and elsewhere in Bernwood Forest between September and early November (1984-1986) this is the only third brood engrailed I have captured.

The third brood specimen is notable in having a wing span of 33mm, which is much larger than any second brood individual trapped in Bernwood. Eight of the latter, including both sexes, are present in the Bernwood collection and all are between 27 and 29mm in span. The third brood specimen is closer in appearance to typical first brood individuals. Nine of these spring individuals are in the Bernwood collection and all but one are greater than 30mm in wing span (mean 31.7, extremes 28-34mm). It is common experience that lepidopterous larvae develop faster at higher temperatures and produce smaller adults and this presumably accounts for the size variation between the broods of the engrailed. The fact that Bernwood Forest is a noted frost hollow may explain why third brood engrailed are apparently a rare event there.

Acknowledgement

I would like to acknowledge the support of Oxford Polytechnic during the course of the fieldwork.

References

Heath, J. 1965. A genuinely portable MV light trap. *Entomologist's Rec. J. Var.* 77: 236-238.

West, B.K. 1987. Third brood specimens of *Ectropis bistortata* Goeze (Lep: Geometridae). *Entomologist's Rec. J. Var.* 99: 84-85.

STRIPED HAWK-MOTH, HYLES LINEATA LIVORNICA (ESP.) (LEP.: SPHINGI-DAE.)— On the evening of 6th May, 1988 while at Puerto Pollenca, Mallorca the sun faded out as a dense orange-red cloud spread over the horizon to the south. During the following hours dust of the same orange-red colour as the cloud began to fall. It was quite calm and very quiet. My wife and friends moved to the shelter of a covered area near a pool, which was brightly illuminated, when my attention was drawn by the number of striped hawk-moths that suddenly appeared. The first one flew into the pool which I caught to confirm its identity and to show it to my friends before releasing it. Another striped hawk-moth flew into the 'Insect-o-cutor' and was incinerated, much to everyone's horror while at least three others flew past the dancers in the bar to alight and remain passively on the innermost wall. Neither this nor any other species of hawk-moth was seen during the following week and one can only conclude that the striped hawk-moths came over in the dust storm PHILIP M. MILES, Werndeg, Cnwch, Coch, that evening. Aberystwyth, Dyfed, Wales.